

## MP1 technical data

Feature	28	32	38	45
Displacement (cm <sup>3</sup> /rev [in <sup>3</sup> /rev])	28.0 [1.71]	31.8 [1.94]	38.0 [2.32]	45.1 [2.75]
Flow at rated (continuous) speed (l/min [US gal/min])	95.3 [25.2]	108.1 [28.5]	125.3 [33.1]	149.5 [39.5]
Torque at maximum displacement (N·m/bar [lbf·in/1000psi])	0.45 [272.0]	0.51 [308.9]	0.60 [369.1]	0.72 [438.1]
Mass moment of inertia of rotating components (kg·m <sup>2</sup> [slug·ft <sup>2</sup> ])	0.0020 [0.0015]		0.0030 [0.0022]	
Mass (kg [lb])	29.6 [65.3]		38 [83.8]	
Oil volume (liter [US gal])	1.5 [0.40]		2.0 [0.53]	
Mounting flange	ISO 3019-1 flange 101-2 (SAE B)			
Input shaft outer diameter, splines and tapered shafts	ISO 3019-1, outer Ø22mm - 4 (SAE B, 13 teeth) ISO 3019-1, outer Ø25mm - 4 (SAE B-B, 15 teeth)		ISO 3019-1, outer Ø31mm - 4 (19 teeth) ISO 3019-1, outer Ø25mm - 4 (Straight Key) ISO 3019-1, outer Ø25mm - 3 (Conical keyed, taper 1:8)	
Auxiliary mounting flange with metric fasteners, shaft outer diameter and splines	ISO 3019-1, flange 82-2, outer Ø16mm - 4 (SAE A, 9 teeth) ISO 3019-1, flange 82-2, outer Ø19mm - 4 (SAE A, 11 teeth) ISO 3019-1, flange 101-2, outer Ø22mm - 4 (SAE B, 13 teeth) ISO 3019-1, flange 101-2, outer Ø25mm - 4 (SAE B-B, 15 teeth)			
Main port configuration A, B	ISO 11926-1 - 1 1/16 - 12 (Inch O-ring boss)		ISO 11926-1 - 1 5/16 - 12 (Inch O-ring boss)	
	ISO 6149-1, M27x2 (Metric o-ring boss)		ISO 6162, Ø19mm, (Split flange boss, M10x1.5) ISO 6149-1 - M33x2 (Metric O-ring boss)	
Case drain ports L1, L2	ISO 11926-1, 1 1/16 - 12 (Inch O-ring boss) ISO 6149-1, M27x2 (Metric O-ring boss)			
Suction ports S	ISO 11926-1 - 1 1/16-12 (Inch O-ring boss) ISO 6149-1 - M27x2 (Metric O-ring boss)		ISO 11926-1 - 1 5/16-12 (Inch O-ring boss) ISO 6149-1 - M33x2 (Metric O-ring boss)	
Other ports	ISO 11926-1, (Inch O-ring boss) ISO 6149 -1, (Metric O-ring boss)			
Customer interface threads	Metric fasteners			

## Technical specifications

### MP1 operating parameters

Features		Units	28/32	38/45
Input speed	Minimum <sup>1</sup>	min <sup>-1</sup> (rpm)	500	500
	Rated		3400	3300
	Maximum		4000	3900
System pressure	Maximum working pressure	bar [psi]	350 [5000]	350 [5000]
	Maximum pressure		380 [5429]	380 [5429]
	Minimum low loop (above case)		10 [143]	10 [143]
Charge pressure (minimum)		bar [psi]	16 [232]	16 [232]
Charge pump inlet pressure	Minimum (continuous)	bar (absolute) [in Hg vacuum]	0.8 [6]	0.8 [6]
	Minimum (cold start)		0.2 [24]	0.2 [24]
	Maximum		2.0	2.0
Case pressure	Rated	bar [psi]	3 [43]	3 [43]
	Maximum		5 [71]	5 [71]